

***Department of Commerce  
United States Census Bureau  
OMB Information Collection Request  
2020 Census  
OMB Control Number 0607-1006***

**B. COLLECTIONS OF INFORMATION EMPLOYING STATISTICAL METHODS**

**1. Universe and Respondent Selection**

The objective of the census is to count—once and only once—every person residing in every geography included in the census area. To reach this goal, various procedures are employed for address frame building and enumeration of the population. All people are to be counted according to the established Residence Criteria and Residence Situations. Housing units that are occupied or that could be occupied are also to be counted, as are all occupied group quarters.

The total respondent universe for the 2020 Census consists of every person residing in the 50 states and the District of Columbia, as well as federally affiliated people overseas. In addition, this package covers the enumeration of the population in Puerto Rico and of the populations in the Island Areas of American Samoa, the Commonwealth of the Northern Mariana Islands, Guam, and the United States Virgin Islands. The estimated population in the United States, Puerto Rico, and Island Areas is shown in Table 3 below.

The delineation into methodologies for enumeration and address list updating in all geographies is called the Type of Enumeration Area (TEA) delineation. The TEAs designated for the 2020 Census are:

\* TEA 1 = Self-Response.

\* TEA 2 = Update Enumerate.

\* TEA 3 = Island Areas.

\* TEA 4 = Remote Alaska.

\* TEA 5 = Military.

\* TEA 6 = Update Leave.

The most common enumeration method by percentage of households is self-response (TEA 1), where materials will be delivered to each address through the mail, and self-response is supported and promoted. In this TEA, after the initial self-response phase, nonresponding households will be included for enumeration in the Nonresponse Followup (NRFU) operation.

Update Enumerate (TEA 2) uses the methodology of updating the address list and attempting enumeration of the household with a respondent at the same time. There is not a self-response rate for this TEA. The Island Areas (TEA 3) do not have a pre-existing address list. For these areas, the address list will be created and enumeration will be attempted at the same time. There is also not a response rate for this TEA. Remote Alaska (TEA 4) uses the Update Enumerate methodology but in remote areas of Alaska that require a different schedule for enumeration, as described in Supporting Statement A. Military areas (TEA 5) require special procedures due to security restrictions. Update Leave (TEA 6) is an update of the address list at the same time that a questionnaire is left at each individual housing unit. Self-response is supported and promoted. Puerto Rico is designated as entirely Update Leave

(except for military locations), as discussed in Supporting Statement A. TEAs 1 and 6 are the only TEAs that allow for self-response and are, therefore, the only TEAs for which a response rate (or self-response rate) can be calculated or estimated.

The number of housing units designated for each TEA is shown in Table 1.

Table 1 – Type of Enumeration Area, Methodology and Housing Unit Counts

Type of Enumeration Area (TEA)	Methodology for Address Updates and Enumeration	Number of Housing Units (estimated)
TEA 1	Self-Response	137,542,028
TEA 2	Update Enumerate	8,050
TEA 3	Island Areas	NA
TEA 4	Remote Alaska	26,466
TEA 5	Military	241,522
TEA 6	Update Leave	6,467,270
<b>TOTAL</b>		<b>144,285,336</b>

(Note that due to timing differences between when this TEA delineation was finalized and when the Life-Cycle Cost Estimate—the source of counts for the burden estimate—was last regenerated, there are differences in projected housing unit counts between Table 1 in this document and the burden estimate in Supporting Statement A and elsewhere. The burden estimate will be updated to reflect more recent Life-Cycle Cost Estimate projections in the next Federal Register Notice that will announce the Evaluations and Experiments revision to this Information Collection.)

A map of the TEA delineations is at the following link:

[https://www2.census.gov/geo/maps/DC2020/TEA/Cen2020\\_US\\_TEA\\_WallMap.pdf](https://www2.census.gov/geo/maps/DC2020/TEA/Cen2020_US_TEA_WallMap.pdf)

The expected response rate for the 2020 Census is 60.5 percent. This is based on response rates for previous censuses as well as response rates to the American Community Survey between 2010 and now, shown in Table 2.

Table 2 – Response Rates and Projected Response Rates for all censuses using Self-Response

	<b>Mail Response SF and LF*</b>	<b>Mail Response SF only*</b>	<b>Mail Response LF only*</b>
<b>1970 Census</b>	78.3%	Not available	Not available
<b>1980 Census</b>	75.0%	Not available	Not available
<b>1990 Census</b>	65.0%	65.9%	60.6%
<b>Census 2000</b>	64.3%	66.4%	53.9%
<b>2010 Census</b>	SF only	63.5%	Not applicable
<b>2020 Census</b>	SF only	60.5%** (projected)	Not applicable

SF=Short Form LF=Long Form

\* Rate shown is of the start of Nonresponse Followup (NRFU), so excludes late mail returns, and includes both occupied and vacant units because occupancy status unknown at that point for nonresponding households. As such, it is not the best measure of voluntary participation, but its converse (the nonresponse rate) defines the workload for the NRFU field operation. For the 2020 Census, this represents all self-response, including by internet, telephone, and paper mail returns.

\*\* 2019 Census Test may result in updated rates.

This package also covers the In-Field Address Canvassing operation.

Address Canvassing is the operation where the address list is validated or updated prior to the census. For the 2020 Census there will be a full Address Canvassing of the country that will consist of In-Office Address Canvassing

complemented with In-Field Address Canvassing. In-Office Address Canvassing is the process of using empirical geographic evidence (e.g., imagery, comparison of the Census Bureau's address list to partner-provided lists) to assess the current address list and make changes where necessary. This component also detects and captures areas of change from high quality administrative records and third-party data. Advancements in technology have enabled continual address and spatial updates to occur throughout the decade as part of the In-Office Address Canvassing effort, as well as through address list updates provided by the United States Postal Service (USPS) and address and map updates provided by geographic program partners. Since 2015, satellite imagery has been used for the identification of areas where there are changes in living quarters. Where the necessary updates can be captured from electronic sources and are deemed to be sufficiently accurate, In-Office Address Canvassing will complete the update process prior to the census. Otherwise, the block will become eligible to be sent to In-Field Address Canvassing for updating on the ground by field staff.

In-Field Address Canvassing will cover an estimated 40 percent of the estimated 139.3 million USPS Delivery living quarters in the United States. During the In-Field Address Canvassing field operation, contact will be attempted at all living quarters in the assigned area to confirm address information and type of living quarters, but contact is not necessary for successful completion. It is anticipated that a maximum of 25 percent of the households in the universe for the operation will result in contact during the

In-Field Address Canvassing. Puerto Rico will not be visited in In-Field Address Canvassing, as the list updating in Puerto Rico will occur within the Update Leave operation at the time of the enumeration, as described in Supporting Statement A. Similarly, the Island Areas will not be included in Address Canvassing or visited in In-Field Address Canvassing, as the address list will be created during the enumeration phase.

The federally affiliated population that should be included in the census count for apportionment purposes will be enumerated through administrative records. All federal agencies will be contacted and asked to provide the counts of people who should be enumerated while they serve the agency and the federal government in a location outside of the 2020 Census jurisdiction.

The summary of respondent universe, respondent selection, expected response rates, and 2010 Census response rates is shown in Table 3. Response rates for both the 2010 Census and the 2020 Census are calculated as of at the time that the NRFU workload is created.

Table 3 – Summary of Expected Population, Living Quarters and Response Rates

Geographic Area	Expected Population Count	Expected Living Quarters Count	Expected Response Rate	2010 Census Response Rate
United States - stateside	350,000,000	146,200,000	60.5%	63.5%
Federally affiliated	1,877,000	Not applicable	Not applicable	Not applicable

persons and dependents overseas				
Puerto Rico	3,400,000	1,200,000	*	Not reported
Island Areas	375,000	139,000	Not applicable	Not applicable
In-Field Address Canvassing	Not Applicable	48,800,000	Maximum 25%	Not reported

\* This estimate has not been created at the time this document was finalized.

## 2. Procedures for Collecting Information

The objective of the census is to count—once and only once—every person residing in every geography included in the census area. To reach this goal, various procedures are employed for address frame building and enumeration of the population. Throughout the 2020 Census operational design are efforts that focus on:

- Identifying all of the addresses where people live or could live.
- Motivating people to respond.
- Determining what information to collect.
- Collecting information from all households or individuals, including those residing in groups or unique living arrangements.

Identification of all the addresses for stateside and Puerto Rico is accomplished through updating of the Census Bureau’s address and spatial database through geographic partnerships and the American Community Survey, LUCA, and Address Canvassing, in addition to updates provided in

operations prior to and throughout the census, as described in Supporting Statement A and the Address Canvassing Detailed Operational Plan.

For In-Field Address Canvassing, the address list is verified and updated in the field, as needed. Living quarters are classified for operational purposes into housing units and group quarters. Group quarters are living quarters where people who are typically unrelated have group living arrangements and frequently are receiving some type of service. College/university student housing and nursing/skilled-nursing facilities are examples of group quarters. The Census Bureau will enumerate people residing in group quarters through in-field visits or administrative records data for certain types of group quarters, including enumeration at regular group quarters as well as on military installations or on maritime vessels.

Transitory locations are areas such as recreational vehicle parks, campgrounds, racetracks, circuses, carnivals, marinas, hotels, and motels, where people who do not have a usual home may be staying during the time of the census. The occupied living quarters within the transitory locations will be counted as housing units.

In TEA 1, the mailing materials strategy is designed to maximize self-response at housing units. The majority of the basic collection units (a geographic designation, usually a block) in TEA 1 will be designated for Internet First, where internet response is encouraged and a full questionnaire is sent only in the fourth mailing and to nonresponders only. The Internet Choice strategy is selected for those TEA 1 areas where low internet

coverage or connectivity or other characteristics may make it less likely the householders will complete the census questionnaire online. A questionnaire is delivered in the first mailing for these areas.

Table 4 – Mailing Strategies in TEA 1 (Self-Response)

<b>Mailing Materials Treatment</b>	<b>Mailing 1</b>	<b>Mailing 2</b>	<b>Mailing 3*</b>	<b>Mailing 4*</b>	<b>Mailing 5*</b>
<b>Internet First</b>	Letter with internet invitation	Reminder letter	Reminder postcard	Questionnaire with letter with internet option	“It’s Not Too Late” postcard
<b>Internet Choice</b>	Questionnaire with letter with internet option	Reminder letter	Reminder postcard	Questionnaire with letter with internet option	“It’s Not Too Late” postcard

\* Targeted only to nonrespondents.

For every housing unit on the Census Bureau’s address list in TEAs 1 (Self-Response) and 6 (Update Leave) for which no self-response is received by a particular date, a follow-up field operation will collect the data, in particular Nonresponse Followup (NRFU). In TEA 2 (Update Enumerate), if enumeration is not achieved during the Update Enumerate visit, the housing unit will be included in the NRFU operation workload. Through automation, the universe of housing units that have provided an enumeration through self-response can be updated daily as additional responses are received through internet, telephone, or mail, even after NRFU has begun. This will contribute to minimizing respondent burden.

People living in group quarters will be counted through group quarters operations, using either Administrative Records of group quarters client-level data (as described in Supporting Statement A) or in-person enumeration for individuals, rather than households. There is also an effort to count people experiencing homelessness who will not be captured in the enumeration at any living quarters. This Service-Based Enumeration captures people receiving services at places such as soup kitchens or regularly scheduled mobile food vans, or utilizing transitional shelters or nonsheltered outdoor locations.

Every operation has some type of quality control to ensure that quality data have been collected. Sometimes this will require a reinterview of a sample of the households or population. If it is determined that quality data were not collected (as described in Supporting Statement A for data collection operations), there will be a recollection of data. In addition, there is a coverage improvement operation that has the objective of collecting additional data from the household respondent when there are certain categories of discrepant or incomplete data for the response. Soft edits, which give an alert when an answer is incomplete or inconsistent, have been incorporated into the Internet Self-Response and NRFU instruments and should reduce rates of these outcomes in the initial enumeration as compared with previous censuses, which also works toward minimizing respondent burden.

### **3. Methods to Maximize Response**

With the objective of counting everyone, 100 percent response is the goal. This can be either self-response or in the NRFU operation or other field operations, in particular Update Enumerate. In combination, these should accomplish enumeration at every housing unit. Special procedures implemented for enumeration at group quarters and at transitory locations are designed to enumerate 100 percent of those universes.

One of the major innovation areas for the 2020 Census is Optimizing Self-Response. A major initiative that falls under the umbrella of this innovation is Internet Self-Response, including the ability for people to respond without the pre-determined ID assigned to the housing unit by the Census Bureau. Self-response is possible only in self-response and Update Leave areas (TEAs 1 and 6). Other areas, for example, areas with high rates of seasonal housing, may be designated for a different enumeration methodology.

The second initiative that falls under the umbrella of Optimizing Self-Response is the Integrated Partnership and Communications operation. This operation has the purpose of communicating the importance of participating in the 2020 Census to the entire population of the 50 states, the District of Columbia, and Puerto Rico. This communication is ongoing throughout the self-response and NRFU phases.

As described in #2 above, all known living quarters are contacted through some method. In those areas designated for self-response, if a response is not received by a particular date, then follow-up procedures to

gather the data begin. Most notably, NRFU then occurs in self-response and Update Leave Types of Enumeration Areas. Other areas and operations involve enumeration at the time of the field visit. In these scenarios, follow-up visits may be required, but this is part of the set of tasks performed within the designated operation.

Group Quarters that have indicated response data would be provided through electronic transmission but for which the data has not been received by the necessary date will be subject to an in-person visit to collect the data.

Island Areas are being enumerated with the methodology that the address list is created at the time of the census and the enumeration is conducted in tandem with the address list creation. This should result in contact at all living quarters and the enumeration of all residents.

To a certain extent, any deviation taken from the traditional enumeration path, represented as self-response (TEA 1) mailings followed by NRFU, can be seen as an effort to improve the ease and likelihood of successful enumeration of groups that might otherwise be undercounted.

Categories of situations that could result in additional efforts to enumerate the population correctly include, but are not limited to:

- People who do not live in traditional housing.
- Children.
- People experiencing homelessness.
- People who have distrust in the government.
- People with low incomes.
- Young, mobile people.
- People with multiple homes they occupy on a seasonal basis.
- Racial and ethnic minorities.
- People who do not speak English fluently.

- Undocumented immigrants.
- Lesbian-gay-bisexual-transsexual-questioning/queer people.
- People with mental and physical disabilities.

Many of these situations when identified in advance of the census may be designated for special address listing or enumeration methods within the TEA delineation. In general, the determination for which methodology is used is made on a geographic basis, specifically at the basic collection unit level.

Enumerating these populations that may be considered “Hard to Count” requires a variety of approaches. Through TEA delineation; multiple modes for self-response; operations for housing units, group quarters, and transitory locations; a variety of follow-up operations for gathering the enumeration, validating the data collections, and improving coverage; various programs that provide language assistance; and other procedures that help collect accurate enumerations of traditionally hard to count populations, it is clear that the Census Bureau puts much effort into gathering the enumeration data for everybody.

#### **4. Tests of Procedures or Methods**

As in previous censuses, the 2020 Census will include some experimental techniques or methods for enumeration data collection. This represents the start of the research program for the next decennial census. The population for these experiments is drawn on some sample basis. The planned 2020 Census Evaluations and Experiments are being handled for OMB clearance with a later planned revision to this package, within a related

Census Bureau package for the Post-Enumeration Survey Independent Listing and QC covered under OMB approval #0607-1009, or within the Generic Clearance for Decennial Census Field Tests and Evaluations, covered under OMB approval #0607-0971.

Multiple tests have been performed throughout the decade to provide data for decisions and refine ongoing operational planning. These tests and the OMB control numbers that apply are:

Generic Clearance for Questionnaire Pretesting Research: 0607-0725

Generic Clearance for Census Bureau Field Tests and Evaluations:  
0607-0971

Federal Statistical System Public Opinion Survey: 0607-0969

2012 National Census Test: 0607-0970

2013 National Census Contact Test: 0607-0972

2013 Census Test: 0607-0975

2014 Census Test: 0607-0979

Address Validation Test: 0607-0809

2015 Optimizing Self-Response Test and 2015 Census Test: 0607-0981

2015 National Content Test: 0607-0985

2015 Group Quarters Electronic Capability Test Survey: 0607-0725

2016 Census Test: 0607-0989

Address Canvassing Testing: 0607-0992

2016 Service-Based Enumeration Census Test: 0607-0971

2017 Census Test: 0607-0996

2017 eResponse Data Transfer Test: 0607-0971

2018 End-to-End Census Test Address Canvassing Operation: 0607-0997

2018 End-to-End Census Test – Peak Operations: 0607-0999

Census Barriers, Attitudes, Motivators Study (Generic Clearance for Internet Nonprobability Panel Pretesting): 0607-0978

## **5. Contacts for Statistical Aspects and Data Collection**

For more information, contact Robin A. Pennington, 301-763-8132,  
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